

AMENDMENTS TO CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) An axial tube assembly for a motor, comprising:

an axial tube adapted to be securely mounted to a casing, with a stator being adapted to be mounted to the axial tube, the axial tube including at least one first engaging member on an inner periphery thereof; and

a sleeve mounted in the axial tube, with a bearing being adapted to be mounted in the sleeve, the sleeve including an annular wall and at least one second engaging member engaged with said at least one first engaging member of the axial tube, said annular wall of the sleeve separating the bearing from the axial tube such that no part of the bearing is in contact with the axial tube;

wherein the sleeve is tightly engaged with the axial tube such that the axial tube and the bearing exert forces ~~to~~on each other to thereby retain the axial tube and the bearing in place.

2. (Withdrawn) The axial tube assembly as claimed in claim 1, wherein said at least one first engaging member of the axial tube includes at least one positioning groove.

3. (Withdrawn) The axial tube assembly as claimed in claim 2, wherein said at least one second engaging member of the sleeve includes at least one key.

4. (Withdrawn) The axial tube assembly as claimed in claim 2, wherein the axial tube further includes at least one guiding groove defined in the inner periphery thereof and aligned with said at least one positioning groove.

5. (Original) The axial tube assembly as claimed in claim 1, wherein the axial tube includes a plurality of longitudinal slits in an upper end thereof, thereby forming a plurality of resilient tabs.

6. (Original) The axial tube assembly as claimed in claim 5, wherein each said resilient tube has a hook on an outer side thereof.

7. (Withdrawn) The axial tube assembly as claimed in claim 5, wherein the sleeve further includes a plurality of positioning blocks respectively received in the slits of the axial tube.

8. (Withdrawn) The axial tube assembly as claimed in claim 5, wherein at least one of the resilient tabs has a length smaller ~~that~~ than the remaining resilient tabs, forming at least one receiving space, the sleeve including at least one hook formed on the outer periphery thereof and engaged in said at least one receiving space.

9. (Withdrawn) The axial tube assembly as claimed in claim 8, wherein the sleeve further includes a plurality of positioning blocks respectively received in the slits of the axial tube.

10. (Currently Amended) A motor comprising:

a casing;

an axial tube securely mounted to the casing, the axial tube including at least one first engaging member on an inner periphery thereof;

a stator mounted to the axial tube;

a sleeve mounted in the axial tube, the sleeve including an annular wall and at least one second engaging member engaged with said at least one first engaging member of the axial tube;
and

a bearing mounted in the sleeve, said annular wall of the sleeve separating the bearing from the axial tube such that no part of the bearing is in contact with the axial tube;

the sleeve being tightly engaged with the axial tube such that the axial tube and the bearing exert forces ~~to on~~ on each other to thereby retain the axial tube and the bearing in place.

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11. (Original) The axial tube assembly as claimed in claim 10, wherein the casing includes a hollow tube in which the axial tube is mounted.

12. (Original) The axial tube assembly as claimed in claim 11, wherein the axial tube includes a plurality of engaging blocks on a lower end of an outer periphery thereof, the hollow tube of the casing including a plurality of engaging grooves in a lower end thereof for respectively and securely receiving the engaging blocks of the axial tube, thereby preventing the axial tube from rotating relative to the casing.

13. (Withdrawn) The axial tube assembly as claimed in claim 10, wherein the axial tube is integrally formed on the casing as a single member.

14. (Original) The axial tube assembly as claimed in claim 10, further including a rotor having a shaft rotatably received in the bearing.

15. (Currently Amended) The axial tube assembly as claimed in claim 14, wherein the rotor includes a hub to which an end of the shaft is securely mounted, the sleeve including an upper end in a position adjacent to the hub, preventing ~~dusts~~ dust from entering the bearing.

16. (Original) The axial tube assembly as claimed in claim 14, wherein the axial tube includes a plurality of protrusions formed on an inner periphery thereof, further including a positioning ring sandwiched between the protrusions of the axial sleeve and a bottom end of the sleeve, with the shaft being rotatably held by the positioning ring.

17. (Withdrawn) The axial tube assembly as claimed in claim 10, wherein the axial tube includes a plurality of protrusions formed on an inner periphery thereof, further including a supporting member having a portion sandwiched between a bottom end of the sleeve and the protrusions of the axial tube, further including a rotor having a shaft rotatably received in the bearing, the shaft having a distal end resting on another portion of the supporting member.

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18. (Withdrawn) The axial tube assembly as claimed in claim 17, wherein the supporting member includes a compartment for receiving an abrasion-resisting plate on which the distal end of the shaft rests.

19. (Withdrawn) The axial tube assembly as claimed in claim 18, further including lubricating oil received in the compartment of the supporting member.

20. (Withdrawn) The axial tube assembly as claimed in claim 10, wherein the bearing is one of an oily bearing, self-lubricating bearing, copper bearing, and sintered bearing.

21. (New) The axial tube assembly as claimed in claim 1, wherein said axial tube includes at least one longitudinal positioning channel in the inner periphery thereof; and said sleeve includes at least one longitudinal rib on an outer periphery thereof, and said longitudinal rib is engaged in said longitudinal positioning channel when assembled.

22. (New) The axial tube assembly as claimed in claim 10, wherein said axial tube includes at least one longitudinal positioning channel in the inner periphery thereof; and said sleeve includes at least one longitudinal rib on an outer periphery thereof, and said longitudinal rib is engaged in said longitudinal positioning channel when assembled.

AMENDMENTS TO SPECIFICATION

Page 8, lines 5-16:

The sleeve 12 is preferably made of a plastic material to form, as shown in Figs. 3-6, a generally cylindrical structure having an annular wall and includes a bottom end having an inner flange 120. The sleeve 12 includes at least one longitudinal rib 121 on an outer periphery thereof. The sleeve 12 further includes at least one engaging member (e.g., a key 122) formed on the outer periphery thereof. The respective key 122 includes a beveled section 122a. When the sleeve 12 is inserted into the axial tube 11, the beveled section 122a of the respective key 122 of the sleeve 12 is slidably guided by the respective groove 118 of the axial tube 11 until the respective key 122 is engaged in the respective positioning groove 115, preventing the sleeve 12 from rotating relative to the axial tube 11. Further, the longitudinal rib 121 of the sleeve 12 is engaged in the longitudinal positioning channel 114 of the axial tube 11, further preventing the sleeve from rotating relative to the axial tube 11.

Page 9, line 19 to Page 10, line 15:

Next, the positioning ring 13, the supporting member 14, and the abrasion-resisting plate 15 are mounted into the axial tube 11. The bearing 20 is then mounted into the sleeve 12, which, in turn, is inserted into and thus tightly engaged in the axial tube 11. As best illustrated in Figs. 5 and 6, the annular wall of the sleeve separates the bearing from the axial tube such that no part of the bearing is in contact with the axial tube. The positioning ring 13, the supporting member 14, and the abrasion-resisting plate 15 are reliably sandwiched between the flange 120 of the sleeve 12 and the protrusions 116 of the axial tube 11. The shaft 41 of the rotor 40 is then extended through the bearing 20 and the positioning ring 13, with the distal end of the shaft 41 resting on the abrasion-resisting plate 15, which, in turn, is supported by a bottom end of the supporting member 14. It is noted that the positioning ring 13 is engaged in the annular groove 411 in the distal end of the shaft 41 in a manner not adversely affecting rotation of the shaft 41, which is conventional and therefore not described in detail. Further, the longitudinal rib 121 of the sleeve 12 is engaged in the longitudinal positioning channel 114 of the axial tube 11, and the

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respective key 122 of the sleeve 12 is engaged in the respective positioning groove 115 of the axial tube 11, preventing the sleeve 12 from rotating relative to the axial tube 11.